

NORTH COMPLEX: BERRY BRUSH WUI

HAZARDOUS FUELS REDUCTION PROJECT

PROPOSAL

Background The North Complex Fire began with a series of lightning strikes August 17, 2020. The Claremont Fire and Bear Fire located on the Plumas National Forest merged and on September 8, 2020 spotted across the Middle Fork Feather River, entered Butte County, and traveled some 30 miles that day. The communities of Berry Creek and Brush Creek were immediately evacuated. The North Complex Fire burned through the Brush Creek Work Center destroying all but three structures. It burned through the community of Brush Creek, the town of Berry Creek was leveled with few homes left standing, and threatened the city of Oroville before its westward spread was stopped.

The fire burned some 202,000 acres of National Forest System (NFS) lands on the Feather River Ranger District including forested land in the wildland urban interface (WUI) around Berry Creek and Brush Creek. Tree mortality has occurred in areas of mixed and high fire severity. These fire-killed trees will become dangerous fuels, represent a safety hazard and risk to forest visitors, and must be removed before reforestation can occur. In some stands, mortality approaches 100% and artificial reforestation efforts will be needed to bring them into compliance with forest plan objectives and NFMA reforestation requirements.

Proposed Project Location The project (PALS 59232) would occur from Bloomer Hill to the southwest to Junction House to the northeast, and include NFS lands nearby Oro-Quincy Highway, Bald Rock Road, Stephens Ridge, Brush Creek, and Mountain House.

Proposed Project Action and Description This project proposes to treat no more than 3,000 acres using a variety of restoration techniques for wildlife habitat and fire- and climate-resilience. To accomplish restoration, FRRD proposes to salvage cut, hand-cut-and-pile brush, burn brush piles, plant trees in the ground, masticate brush, prune resprouting oaks, dig fire-lines by hand, and hand-spray herbicides.

- Salvage Cut (4231) an intermediate harvest removing trees which are dead or dying because of injurious agents other than competition, to recover economic value that would otherwise be lost. Salvage will be conducted following designation by damage class (attachment A). Follow marking guidelines for fire-injured trees in California (Smith and Cluck 2011). No sawlog diameter limits for salvage cut. SNFPA guidelines for snag retention apply.;
- Mastication; any crushing, mowing, mulching, or other treatment that grinds or shreds vegetation (e.g. brush, fire killed trees) leaving resulting material on the forest floor, to enhance the success of natural regeneration (4494) or regeneration on sites that will be replanted (4474);
- Herbicide treatments; site preparation and release treatments by application of

herbicides to control competing vegetation (target species would be primarily the shrub species ceanothus, manzanita, deer brush, Himalayan blackberry and other species as necessary). Herbicides would be limited to glyphosate and triclopyr using a targeted backpack sprayer and cut-and-daub methods to enhance the success of natural regeneration (4492) or regeneration on sites that will be replanted (4472, 4511), in accordance with stream buffer and operating period restrictions in the management requirements table;

- Hand-Cut; felling of trees and shrubs using chainsaws to enhance the success of natural regeneration (4494) or regeneration on sites that will be replanted (4474);
- Yarding (1120); removal of activity-generated slash and other fuels from the site by carrying or dragging;
- Piling of Fuels, Hand or Machine (1153); pile all activity generated slash and cover with waterproof covering for burning during winter months;
- Burning of Piled Material (1130); burning of piled material including hand and machine piles during winter months to remove hazardous fuels;
- Plant Trees (4431); the establishment or re-establishment of forest cover artificially by planting seedlings and/or cuttings, with or without site preparation;
- Establish Research Plots (4040); plots installed for research purposes by experiment stations, universities, or similar;
- Prune (4530); the removal, close to the branch collar or flush with stem, of side branches and multiple leaders from oak (or other hardwood) resprouts;
- Tree Release and Weed (4511); treatment (mechanical or herbicide) designed to free young trees from undesirable, competing vegetation in stands not past sapling stage;
- Precommercial Thin (4521) the selective felling, deadening, or removal of trees from a young stand to maintain a specific stocking or stand density range;
- Dig Fire Lines by Hand (1140); hand-installation of a control line that is scraped or dug to mineral soil;
- Prescribed fire; activity where fire is applied to the majority or all of an area within well-defined boundaries for reduction of fuel hazard, as a resource management treatment, or both to achieve desired conditions;
- Maintenance hand cutting, hand- and/or grapple-piling, mastication, biomassing, targeted grazing, herbicide applications, and prescribed under-burning as needed on multiple entries over the next 30 to 40 years to maintain desired conditions.
- The project will include road improvements and maintenance (9007, 9008) to existing roads.

Purpose of Action In areas where fire regimes and forest structure have been dramatically altered, there is increasing concern that contemporary fires have the potential to set forests on a positive feedback trajectory with successive reburns, one in which extensive stand replacing fire could promote more stand-replacing fire. Coppoletta et al. (2016) results suggest that high-to moderate severity fire in initial fires led to an increase in standing snags and shrub vegetation, which in combination with severe fire weather promoted high-severity fire effects in subsequent reburn. Although fire behavior is largely driven by weather, post-fire vegetation composition and structure are also important drivers of reburn severity. In the face of changing

climatic regimes and increases in extreme fire weather, managers require options to create more fire-resilient ecosystems.

To promote scientific research regarding the effects of large fires on the environment. Research opportunities to study the effects of large, high-intensity fires and restoration treatments on wildlife, conifer seed dispersal, tree recruitment, soil erosion, aquatic resources, and fuel accumulation are abundant within the North Complex Fire perimeter. The Plumas NF is working with scientists from the Pacific Northwest Research Station, Region 5 Ecology Program, and Pacific Southwest Research Station to take advantage of the opportunity that a fire of this scale and intensity provides. This research would add to a better understanding of the potential effects of management of burned forests to achieve long-term resilience and the conservation of native plants and animal species associated with these habitats.

Need for Action Section 605, of the Healthy Forests Restoration Act (HFRA) authorizes hazardous fuels reduction projects that reduce the risk or extent of, or increase the resilience to, wildfires.

The January, 2004, Sierra Nevada Forest Plan Amendment provides for ecosystem restoration following catastrophic disturbance events through the salvage harvest of dead and dying trees conducted to recover the economic value of this material and to support objectives for reducing hazardous fuels, improving forest health, reintroducing fire, and/or reestablishing forested conditions.

Providing socioeconomic benefits, including the provision of a sustainable supply of timber, is part of the mandate of the USDA Forest Service. Providing adequate timber supplies contributes to the economic stability of rural communities in Sierra Nevada forests.

Additional Information The project is anticipated to have a decision in summer, 2021 and implementation can begin as early as late summer or fall 2021. Please provide comments to Clay Davis, clay.davis@usda.gov; Ryan Davy, ryan.davy@usda.gov; or Eric J. Murphy, eric.j.murphy@usda.gov